



PAME WORK PLAN

2013-2015

PAME
Protection of the Arctic Marine Environment



ARCTIC COUNCIL

PAME WORK PLAN 2013-2015

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Preface

The purpose of the PAME Work Plan is to provide a framework for PAME's work related to the protection of the Arctic marine environment for the period of 2013-2015. PAME's Working Group activities are based on its mandate to address policy and non-emergency pollution prevention and control measures related to the protection of the Arctic marine environment from both land and sea-based activities. These measures include coordinated action programs, assessments and guidelines, complementing existing legal arrangements.

The PAME Working Group provides a unique forum for collaboration on a wide range of Arctic marine environment issues and consists of National Representatives from the Arctic Council states responsible for its work in their respective countries and Permanent Participants organizations representing Arctic indigenous peoples. Additionally, the Arctic Council working groups, accredited observers and other relevant organizations contribute to the on-going work of the PAME Working Group.

The PAME Working Group generally meets twice a year to assess progress and advance its work. PAME is headed by a chair and vice-chair, which rotate among the Arctic countries and is supported by an International Secretariat. PAME reports to the Senior Arctic Officials, and through them, to the Ministers of the Arctic Council that meets every two years. PAME's work plan is approved by the Ministers.

Introduction

The PAME Work Plan 2013-2015 was developed according to: PAME's mandate; priorities identified by the Arctic Council Chairmanship; direction provided in Ministerial declarations; and follow-up on actions and relevant recommendations from Arctic Council projects and the 2004 Arctic Marine Strategic Plan (AMSP) which outlines the overall direction of the Arctic Council for the protection of the Arctic marine environment. PAME Working Group activities have been aimed at implementation of the AMSP, the 2009 Arctic Marine Shipping Assessment, and policy follow up to the scientific and other assessments of the Arctic Council.

PROJECTS AND ACTIVITIES

OBJECTIVE I:

Improve knowledge and respond to emerging knowledge of the Arctic marine environment

BACKGROUND:

Arctic marine operations and activities are increasing and are expected to continue to expand in the coming years as a result of increased resource demand and improved access to those resources and routes to and through the Arctic. Increased operations and activities will increase risks to the environment, its ecological processes, and people residing in the Arctic. In this regard the Arctic Council encourages the development of suitable national and international regulations, measures and guidelines to reduce risks and potential negative impacts associated with shipping and other marine activities in Arctic waters. In addition, development of appropriate infrastructure is encouraged in order to support safe and environmentally responsible shipping and resource extraction in the Arctic.

ACTIVITIES:

1. Follow-up of AMSA Recommendations (refer to AMSA Matrix in Annex I)		
Actions	Activities	Lead(s)
AMSA I(A) – Linking with International Organizations	PAME will continue to monitor and, as appropriate, identify opportunities to engage with international organizations such as the IMO, ISO, IALA, WMO and the Arctic Regional Hydrographic Commission to advance implementation of the AMSA Recommendations.	US
AMSA I(B) – IMO Measures for Arctic Shipping (actions 1 and 2)	Work is ongoing in the IMO to develop a mandatory Polar Code with a target completion date of 2014. PAME, at the direction of the SAOs, will support the IMO's work by promoting intensified collaboration among Arctic States within the IMO.	All Member States
AMSA I(B) – IMO Measures for Arctic Shipping (action 3) Phase II of the project on Heavy Fuel Oil (HFO) in the Arctic	<p><i>Part 1: Vessel traffic in the Arctic:</i> PAME will obtain and analyze a dataset for the most recently-available 12 months of vessel activity in the Arctic and prepare a characterization of the vessel traffic activity levels and HFO use carriage patterns.</p> <p><i>Part 2: Gap analysis of existing regulatory requirements:</i> The working group will prepare a gap analysis to highlight opportunities and gaps in the existing regulatory requirements for use and carriage of HFO by ships in the Arctic based on the overview of existing regulatory requirements contained in the HFO Phase I Report.</p> <p><i>Part 3: Risk analysis on present and projected use of HFO in the Arctic:</i> PAME will finalize the HFO Phase II report including its recommendations by 1 November 2013 for consideration at PAME I-2014.</p>	Norway US Russian Federation
AMSA I(D) – Strengthening Passenger Ship Safety in Arctic Waters	PAME will continue to monitor and support IMO initiatives to strengthen passenger ship safety and work with the passenger ship industry and other stakeholders in the identification and augmentation of best practices.	Canada Denmark US
AMSA II(A) – Survey of Arctic Indigenous Marine Use	PAME will solicit regular progress reports from Arctic States, PPs and others as relevant, including the AIA project on building marine based subsistence mapping capacity in Arctic coastal communities. PAME also encourages Arctic States to share with AIA and others, as appropriate, relevant information or methodologies.	PAME Chair/ Secretariat

<p><i>AMSA II (D) -Specially Designated Arctic Marine Areas:</i></p>	<p>PAME has retained a consultant to assist in developing recommendations on areas within the high seas of the Arctic Ocean that may merit consideration by Arctic States as possible proposals for protective measures in IMO. The consultant's final report is due 1 November 2013. PAME will also convene a workshop in June 2013 to coordinate and advance this project, based on the final AMSA II(C) Report on Areas of Heightened Ecological and Cultural Significance and the work plan for AMSA II(D).</p>	<p>Canada Finland Norway Russian Federation US</p>
<p><i>AMSA II(G) – Addressing Impacts on Marine Mammals</i></p>	<p>PAME will collaborate with other Arctic Council working groups to monitor and provide support as appropriate to work undertaken by other international and bodies such as IMO and IWC regarding the impact of shipping on marine mammals.</p>	<p>PAME Chair/ Secretariat US</p>
<p><i>AMSA II(H) – Reducing Air Emissions</i></p>	<p>PAME will monitor and support IMO's work related to black carbon, in particular as it relates to the Arctic and explore synergies for supporting other Arctic Council efforts on black carbon. PAME also encourages continued scientific research related to black carbon emissions including with respect to a technical definition of black carbon and appropriate measurement methods and control measures.</p>	<p>Finland Norway Russian Federation US</p>
<p><i>AMSA III(A) – Addressing the Infrastructure Deficit</i></p>	<p>The working group will continue to monitor and support initiatives for strengthening Arctic marine infrastructure, including with respect to the AMATII project.</p>	<p>Russian Federation US</p>
<p><i>AMSA III(B) – Arctic Marine Traffic Systems</i></p>	<p>Building upon its work related to vessel traffic monitoring and tracking: PAME will explore how Arctic states can enhance the ability to collect and share such information, including in cooperation with other regional bodies, and how such information could be used to support PAME's work related to conservation and sustainable development. Enhanced and ongoing understanding of vessel traffic could be shared with others and/or used to develop recommendations for consideration by Arctic states of new vessel traffic measures, location/pre-positioning of SAR resources, and approaches for addressing impacts of shipping on marine and coastal resources and communities.</p>	<p>Russian Federation US</p>

<i>Developing a sustainable tourism initiative</i>	PAME will reach out to the SDWG, AMAP and CAFF to explore the development of a sustainable tourism initiative. Potential elements within this cross-cutting initiative could include: <ul style="list-style-type: none"> ✓ collecting and assessing existing information regarding trends in Arctic tourism; ✓ collecting and assessing existing information on both the adverse and beneficial environmental, social, and cultural impacts of Arctic tourism; ✓ inventorying existing laws, codes, policies, guidelines and best practices pertaining to sustainable Arctic tourism; ✓ based on an evaluation of the inventory, identifying fundamental principles of sustainable Arctic tourism; ✓ publicizing these principles and encouraging their adoption and/or implementation by key Arctic actors; ✓ if/as appropriate, developing or encouraging the development of more specific code or best practices of sustainable Arctic tourism, tailored to specific regions, communities, destinations, ecosystems, or industries. 	Canada US
<i>Update the Arctic ship traffic data</i>	The working group will explore opportunities for updating the Arctic ship traffic data contained in the AMSA report for use in studies, assessments, trend analyses, and the development of recommendations that enhance Arctic marine safety and support protection of Arctic people and the environment etc.	All Member States
<i>AMSA implementation progress report</i>	PAME will continue to provide biennial AMSA implementation progress reports for submission to the Arctic Council meetings (e.g. 2013 and 2015).	Canada Finland US
2. Follow up on the Arctic Offshore Oil and Gas Guidelines (2009)		
Actions	Activities	Lead(s)
<i>Health, Safety and Environmental Management Systems for Arctic Offshore and Gas Operations (HSE project)</i>	Ongoing project as per the agreed timeline. To be finalized for submission and approval in late 2013 or early 2014.	US
<i>Arctic Oil and Gas Management, Regulation and Enforcement Web-Based Information Resource (MRE Project)</i>	Ongoing – updating the MRE web-based information annually 2 weeks prior to the PAME Winter/Spring meetings. Include information regarding existing national liability and compensation regimes for oil pollution damage resulting from offshore exploration in the Arctic as a contribution to the update of the Oil and Gas Assessment.	PAME Secretariat in collaboration with the PAME Oil and Gas contact group

OBJECTIVE II:

Determine the adequacy of applicable international/regional commitments and promote their implementation and compliance

BACKGROUND:

The increasing number and diversity of human activities in the Arctic marine environment pose challenges to its health and warrants an ecosystem approach to integrated ocean management to maximize environmental protection and sustainable use, including related to shipping, tourism, oil and gas development, fisheries, coastal zone development, and other ocean-related activities. The Arctic Council has an opportunity to provide international leadership on the global sustainable development agenda through adoption of the ecosystem based approach to management of the Arctic marine environment, consistent with existing legal frameworks.

ACTIVITIES:

Actions	Activities	Lead(s)
<p>1) <i>Arctic Ocean Review follow-up on relevant recommendations</i></p>	<p>Activities to be added based on the outcomes/ findings of the approved AOR and as agreed to by SAOs in 2013. This will be done by creating a matrix of activities intended to address the recommendations.</p>	<p>Canada Norway US</p>
<p>2) <i>Developing a new Arctic Council Arctic Marine Strategic Plan (AMSP)</i> <i>Based on revisions of the 2004 AMSP</i></p>	<p>The working groups will take into account relevant deliverables agreed at the 2013 Arctic Council meeting for inclusion into a new AMSP. The Arctic Council to direct all Arctic Council working groups to contribute as appropriate and PAME to host a scoping workshop in June 2013. The new AMSP is to be produced for adoption by 2015 Ministerial.</p>	<p>Canada Iceland Norway US</p>

<p>3) Ecosystem Approach to Management</p>	<p>PAME will continue work on integrated assessment and comparing cases and reviewing existing methodologies.</p> <ul style="list-style-type: none"> ✓ To resolve data issues, PAME will continue to work from the 3rd EA workshop (June 2013) at two levels: LMEs and pan-Arctic. ✓ On its ecological objectives, PAME will begin and continue compiling information on higher level objectives and species management objectives for species and habitats; review methodology for setting ecological quality objectives. ✓ PAME will consider the use of identified areas of heightened ecological significance in relation to EA for the Arctic LMEs. ✓ Planning tools include mapping of human uses and habitats in LMEs in relation to integrated assessments and other tools for EA. ✓ Explore the feasibility of developing pilot projects to demonstrate outcomes from the other EA activities. 	<p>Canada Norway US</p>
<p>4) Framework for an Arctic MPA network</p>	<p>PAME will form a Marine Protected Areas (MPA) expert group to explore the development of a framework for an Arctic marine protected areas network, for consideration by the PAME working group.</p>	<p>Canada Norway US</p>
<p>5) Arctic Biodiversity Assessment (ABA)</p>	<p>PAME will consider the ABA recommendations of relevance to PAMEs mandate.</p>	<p>PAME</p>
<p>6) Adaptation Actions for a Changing Arctic (AACCA) – Part C</p>	<p>PAME plans to provide input to the AACCA project Part C in line with the project plan. AMAP leads this work.</p>	<p>PAME</p>

OBJECTIVE III:

Facilitate partnerships, programmes and technical cooperation and support communication and outreach both within and outside the Arctic Council.

BACKGROUND:

There is a need to continue coordinating work with other working groups of the Arctic Council, regional and international organizations and programmes, local authorities and indigenous organizations in an effort to promote capacity building, sharing of information on the state of the Arctic marine environment.

ACTIVITIES:

Actions	Activities	Lead
1) Information outreach and efforts to increase cooperation and collaboration with international/regional organizations.	PAME will liaise and exchange information with relevant organizations and programs (e.g. UNEP Regional Seas Program), regions, and other regional programs.	PAME Chair/Secretariat
2) Build the capacity and engagement of indigenous communities and other Arctic inhabitants.	PAME will develop a communication plan for the PAME Working Group in line with the Arctic Council's communication Strategy (approved in May 2012). PAME Chair/Secretariat leads.	PAME Chair/Secretariat
3) Collaborations with AC Working Groups	Review work plans of other AC WGs to identify areas for cooperation and respond accordingly	All

ANNEX I

AMSA FOLLOW-UP MATRIX

Identified measures in the AMSA-report and method of follow up (Nov 2009)

AMSA Recommendations	Follow-up Required at the global, regional or national level	Method of Follow-up by PAME
I) Enhancing Arctic Marine Safety		
<p>A. Linking with International Organizations: That the Arctic states decide to, on a case by case basis, identify areas of common interest and develop unified positions and approaches with respect to international organizations such as: the International Maritime Organization (IMO), the International Hydrographic organization (IHO), the World Meteorological Organization (WMO) and the International Maritime Satellite Organization (IMSO) to advance the safety of Arctic marine shipping; and encourage meetings, as appropriate, of member state national maritime safety organizations to coordinate, harmonize and enhance the implementation of the Arctic maritime regulatory framework.</p>	<p>Cooperate as appropriate in the: International Maritime Organization (IMO);</p> <ul style="list-style-type: none"> • International Hydrographic Organization (IHO); • World Meteorological Organization (WMO); • International Maritime Satellite Organization (IMSO and,) • Any other relevant organization. 	<p>PAME to identify areas of common interest and develop to the extent possible unified positions and approaches to improve the Arctic maritime regulatory framework.</p>

<p>B. IMO Measures for Arctic Shipping: That the Arctic states, in recognition of the unique environmental and navigational conditions in the Arctic, decide to cooperatively support efforts at the International Maritime Organization to strengthen, harmonize and regularly update international standards for vessels operating in the Arctic. These efforts include: ---Support the updating and the mandatory application of relevant parts of the <i>Guidelines for Ships Operating in Arctic Ice-covered Waters</i> (Arctic Guidelines); and, ---Drawing from IMO instruments, in particular the Arctic Guidelines augment global IMO ship safety and pollution prevention conventions with specific mandatory requirements or other provisions for ship construction, design, equipment, crewing, training and operations, aimed at safety and protection of the Arctic environment.</p>	<ol style="list-style-type: none"> 1) Update and as appropriate make mandatory the <i>Guidelines for Ships Operating in Arctic Ice-covered Waters</i>, 2) Augment global IMO ship safety and pollution prevention conventions with specific mandatory requirements, or other provisions, aimed at safety and protection of the Arctic environment. 3) Especially consider the identification of, environmental risks and options for, avoiding or minimizing those risks regarding the use and carriage of heavy fuel oil, aiming at establishment of appropriate international regulations. 	<ol style="list-style-type: none"> 1) PAME to encourage co-operation and the development of unified positions to the extent possible among Arctic states 2) PAME to encourage co-operation and the development of unified positions to the extent possible among Arctic states 3) PAME to encourage co-operation and the development of unified positions to the extent possible among Arctic states <p><i>Canada, Denmark and Norway preliminarily indicated lead country roles.</i></p>
<p>C. Uniformity of Arctic Shipping Governance: That the Arctic states should explore the possible harmonization of Arctic marine shipping regulatory regimes within their own jurisdiction and uniform Arctic safety and environmental protection regulatory regimes, consistent with UNCLOS, that could provide a basis for protection measures in regions of the central Arctic Ocean beyond coastal state jurisdiction for consideration by the IMO.</p>	<p>Explore the possible harmonization of Arctic marine shipping regulatory regimes and uniform Arctic safety and environmental protection regulatory regimes, consistent with UNCLOS, that could provide a basis for protection measures in regions of the central Arctic Ocean beyond coastal state jurisdiction for consideration by the IMO.</p>	<p>PAME to initiate a process or processes to explore this further. Legal discussion to be accompanied by technical discussions as appropriate. Arctic states to provide appropriate legal and technical expertise. No lead identified at this stage-</p>

<p>D. Strengthening Passenger Ship Safety in Arctic Waters: That the Arctic states should support the application of the IMO's <i>Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities</i>, given the extreme challenges associated with rescue operations in the remote and cold Arctic region; and strongly encourage cruise ship operators to develop, implement and share their own best practices for operating in such conditions, including consideration of measures such as timing voyages so that other ships are within rescue distance in case of emergency.</p>	<ol style="list-style-type: none"> 1) Support the application of the IMO's <i>Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities</i>; and, 2) Strongly encourage tour operators to develop, implement and share their own best practices for operating in such conditions. 	<p>PAME to invite maritime safety authorities to participate in this discussion and encourage them to identify possible measures to increase passenger ship safety in Arctic waters. PAME to identify lead country(ies)</p> <p>Identify increased safety through appropriate IMO measures, lead countries should be encouraged to bring proposals to the appropriate bodies of IMO, and to report progress and outcome to PAME as appropriate.</p>
<p>E. Arctic Search and Rescue (SAR) Instrument: That the Arctic states decide to support developing and implementing a comprehensive, multi-national Arctic Search and Rescue (SAR) instrument, including aeronautical and maritime SAR, among the eight Arctic nations and, if appropriate, with other interested parties in recognition of the remoteness and limited resources in the region.</p>	<p>Establishment of a task force to develop and complete negotiation by the next Ministerial meeting in 2011 of an international instrument on cooperation on search and rescue operations in the Arctic</p>	<p>PAME to contribute to the Arctic Council SAR task force and EPPR as appropriate.</p>
<p>II. Protecting Arctic People and the Environment</p>		
<p>A. Survey of Arctic Indigenous Marine Use: That the Arctic states should consider conducting surveys on Arctic marine use by indigenous communities where gaps are identified to collect information for establishing up-to-date baseline data to assess the impacts from Arctic shipping activities.</p>	<ol style="list-style-type: none"> 1) Consider conducting surveys on Arctic marine use by indigenous communities; and, 2) Where gaps are identified, collect information for establishing up-to-date baseline data to assess the impacts from Arctic shipping activities 	<p>PAME to encourage national governments, in collaboration with PPs, to implement this recommendation as it relates to their country.</p> <p>PAME to follow up with SDWG and CAFF to consider options for the Arctic Council to carry out activities to implement this recommendation.</p>

<p>B. Engagement with Arctic Communities: That the Arctic states decide to determine if effective communication mechanisms exist to ensure engagement of their Arctic coastal communities and, where there are none, to develop their own mechanisms to engage and coordinate with the shipping industry, relevant economic activities and Arctic communities (in particular during the planning phase of a new marine activity) to increase benefits and help reduce the impacts from shipping.</p>	<ol style="list-style-type: none"> 1) Determine if effective communication mechanisms exist with Arctic coastal communities; and, 2) Where there are none, develop mechanisms to engage and coordinate with the shipping industry, relevant economic activities and Arctic communities (in particular during the planning phase of a new marine activity) to increase benefits and help reduce the impacts from shipping. 	<p>This is national responsibility and no follow up is required by PAME.</p>
<p>C. Areas of Heightened Ecological and Cultural Significance: That the Arctic states should identify areas of heightened ecological and cultural significance in light of changing climate conditions and increasing multiple marine use and, where appropriate, should encourage implementation of measures to protect these areas from the impacts of Arctic marine shipping, in coordination with all stakeholders and consistent with international law.</p>	<ol style="list-style-type: none"> 1) Identify areas of heightened ecological and cultural significance in light of changing climate conditions and increasing multiple marine use; and, 2) Where appropriate, encourage the implementation of measures to protect these areas from the impacts of Arctic marine shipping, in coordination with all stakeholders and consistent with international law. 	<p>PAME to approach AMAP and CAFF and ask for their advice regarding identification of areas of heightened ecological and cultural significance-</p>
<p>D. Specially Designated Arctic Marine Areas: That the Arctic states should, taking into account the special characteristics of the Arctic marine environment, explore the need for internationally designated areas for the purpose of environmental protection in regions of the Arctic Ocean.</p>	<p>Explore the need for internationally designated areas for the purpose of environmental protection in regions of the Arctic Ocean.</p> <p>This could be done through the use of appropriate tools, such as "Special Areas" or Particularly Sensitive Sea Areas (PSSA) designation through the IMO and consistent with the existing international legal framework in the Arctic.</p>	<p>Based on C and other sources of information PAME to encourage co-operation and the development of common or shared proposals to the extent possible among Arctic states for submission to IMO.</p> <p><i>Denmark and/or Norway may co-lead</i></p>

<p>E. Protection from Invasive Species: That the Arctic states should consider ratification of the IMO <i>International Convention for the Control and Management of Ships Ballast Water and Sediments</i>, as soon as practical. Arctic states should also assess the risk of introducing invasive species through ballast water and other means so that adequate prevention measures can be implemented in waters under their jurisdiction.</p>	<ol style="list-style-type: none"> 1) Consider ratification of the IMO <i>International Convention for the Control and Management of Ships Ballast Water and Sediments</i>, as soon as practical; and, 2) Assess the risk of introducing invasive species through ballast water and other means so that adequate prevention measures can be implemented in waters under Arctic States' jurisdiction. 	<p>This is national responsibility and no follow up is required by PAME</p> <p>PAME to follow up on this recommendation through the AOR</p>
<p>F. Oil Spill Prevention: That the Arctic states decide to enhance the mutual cooperation in the field of oil spill prevention and, in collaboration with industry, support research and technology transfer to prevent release of oil into Arctic waters, since prevention of oil spills is the highest priority in the Arctic for environmental protection.</p>	<p>Enhance the mutual cooperation in the field of oil spill prevention and, in collaboration with industry, support research and technology transfer to prevent release of oil into Arctic waters for environmental protection.</p>	<p>Responsible for follow up: EPPR</p>
<p>G. Addressing Impacts on Marine Mammals: That the Arctic states decide to engage with relevant international organizations to further assess the effects on marine mammals due to ship noise, disturbance and strikes in Arctic waters; and consider, where needed, to work with the IMO in developing and implementing mitigation strategies.</p>	<ol style="list-style-type: none"> 1) Engage with relevant international organizations to further assess the effects on marine mammals due to ship noise, disturbance and strikes in Arctic waters; and, 2) Consider, where needed, to work with the IMO in developing and implementing mitigation strategies. 	<p>PAME to approach AMAP and CAFF to achieve their further assessment of the effects on marine mammals due to ship noise, disturbance and strikes in Arctic waters, and where needed work within IMO to develop and implement mitigation strategies through the use of lead countries,</p>
<p>H. Reducing Air Emissions: That the Arctic states decide to support the development of improved practices and innovative technologies for ships in port and at sea to help reduce current and future emissions of greenhouse gases (GHGs), Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and Particulate Matter (PM), taking into account the relevant IMO regulations.</p>	<p>Support the development of improved practices and innovative technologies for ships in port and at sea to help reduce current and future emissions of greenhouse gases (GHGs), Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and Particulate Matter (PM), taking into account the relevant IMO regulations.</p>	<p>The follow up would be through industry, national governments and international organizations, e.g. IMO.</p>

III. Building the Arctic Marine Infrastructure		
<p>A. Addressing the Infrastructure Deficit: That the Arctic states should recognize that improvements in Arctic marine infrastructure are needed to enhance safety and environmental protection in support of sustainable development. Examples of infrastructure where critical improvements are needed include: ice navigation training; navigational charts; communications systems; port services, including reception facilities for ship-generated waste; accurate and timely ice information (ice centers); places of refuge; and icebreakers to assist in response.</p>	<p>Recognize that improvements in Arctic marine infrastructure are needed to enhance safety and environmental protection in support of sustainable development, including:</p> <ul style="list-style-type: none"> • ice navigation training; • navigational charts; • communications systems; • port services, including reception facilities for ship-generated waste; • accurate and timely ice information (ice centers); • places of refuge; and, • Icebreakers to assist in response. 	<p>National follow up point.</p>
<p>B. Arctic Marine Traffic System: That the Arctic states should support continued development of a comprehensive Arctic marine traffic awareness system to improve monitoring and tracking of marine activity, to enhance data sharing in near real-time, and to augment vessel management service in order to reduce the risk of incidents, facilitate response and provide awareness of potential user conflict. The Arctic states should encourage shipping companies to cooperate in the improvement and development of national monitoring systems.</p>	<ol style="list-style-type: none"> 1) Support continued development of a comprehensive Arctic marine traffic awareness system to improve monitoring and tracking of marine activity; enhance data sharing in near real-time; and, augment vessel management service in order to reduce the risk of incidents, facilitate response and provide awareness of potential user conflict. 2) Encourage shipping companies to cooperate in the improvement and development of national monitoring systems. 	<p>PAME to encourage its member states to implement this recommendation.</p>
<p>C. Circumpolar Environmental Response Capacity: That the Arctic states decide to continue to develop circumpolar environmental pollution response capabilities that are critical to protecting the unique Arctic ecosystem. This can be accomplished, for example, through circumpolar cooperation and agreement(s), as well as regional bilateral capacity agreements.</p>	<p>Continue to develop circumpolar environmental pollution response capabilities.</p>	<p>Primary responsibility is: the EPPR. PAME to consider this recommendation in the AOR project.</p>

<p>D. Investing in Hydrographic, Meteorological and Oceanographic Data: That the Arctic states should significantly improve, where appropriate, the level of and access to data and information in support of safe navigation and voyage planning in Arctic waters. This would entail increased efforts for: hydrographic surveys to bring Arctic navigation charts up to a level acceptable to support current and future safe navigation; and systems to support real time acquisition, analysis and transfer of meteorological, oceanographic, sea ice and iceberg information.</p>	<p>Significantly improve, where appropriate, the level of and access to data and information in support of safe navigation and voyage planning in Arctic waters.</p>	<p>National responsibility.</p>
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ANNEX II

PROJECT PLAN FOR DEVELOPING A REVISED ARCTIC COUNCIL ARCTIC MARINE STRATEGIC PLAN (AMSP)

Recognizing the increased emphasis on the ecosystem approach to management (and integrated ocean management) as the foundation of the Arctic Councils' work and the essential need to apply the ecosystem approach to manage Arctic marine-related issues. In this regard PAME has agreed to invite all Arctic Council working groups working on marine-related issues to participate in the PAME led EA Expert Group on the ecosystem approach to management according to its terms of reference.

BACKGROUND:

The Arctic Marine Strategic Plan (AMSP) was adopted by the Arctic Council in 2004. It contains objectives for the management of the Arctic marine environment with related strategic actions. The Arctic Marine Strategic Plan was developed in response to the recognition that

"...existing and emerging activities in the Arctic warrant a more coordinated and integrated strategic approach to address the challenges of the Arctic coastal and marine environment..."

Since the AMSP was adopted in 2004, the Arctic marine environment has been subject to increasing pressures from climate change, economic activities and pollution. The Arctic Council is at the forefront of responses to these emerging issues through the development of in-depth reports and assessments, such as the State of the Arctic Environment Report, the Arctic Climate Impact Assessment (ACIA), the Arctic Marine Shipping Assessment (AMSA), the Arctic Oil and Gas Assessment (AOGA), and ongoing work such as the Arctic Biodiversity Assessment (ABA), Arctic Ocean Review (AOR) and the Recommended Practices for Arctic Oil Spill Prevention (RP3).

The working groups of the Arctic Council AMAP, PAME, CAFF, EPPR and SDWG indicate that most strategic actions of the AMSP have been completed or are progressing according to plan, to be concluded within this or the next workplan period.

The Implementation section in the AMSP states that:

"...PAME, in collaboration with all Arctic Council subsidiary bodies, will lead a review of the Strategic Plan by 2010, or another date specified by the Council, to determine its adequacy in light of the results of ongoing assessments and national and regional reporting."

Therefore, it is timely for the PAME Working Group, in cooperation with the other Arctic Council working groups, to update and revise, as relevant, the AMSP (2004) to secure a healthy and productive and resilient Arctic Ocean and coasts and ensure that the future strategic approach to management of the Arctic marine environment is coordinated between the working groups.

THE OVERALL GOALS:

The overall goals of AMSP:

- That the Arctic marine environment to be managed using an integrated, ecosystem approach to management.
- That the cumulative environmental effects do not exceed a level at which structure, functioning and productivity of ecosystems and biodiversity are maintained.

Based on this, there is a need to update and expand, as relevant, the AMSP (2004) to secure that the future management of the Arctic marine environment is coordinated between the working groups, based on ecosystem-based approach, and that results are effectively implemented.

This will ensure that marine-related activities in the different working groups collectively work towards integration in assessing impacts on the Arctic marine environment and addressing key pressures. This will facilitate the development of policy recommendations.

Integrated approaches will contribute to better informed decisions on sustainable development and environmental protection in the Arctic, benefitting Arctic ecosystems and its residents, in particularly indigenous people.

Rationale:

The stewardship of the Arctic marine environment is of particular importance to the Arctic States. Since the AMSP was adopted in 2004, the Arctic marine environment has been, and will continue to be subject to increasing pressures from climate change, economic activities and pollution.

Most of the strategic actions in the AMSP have been accomplished, or are in the process of being finalized. Through the review of the AMSP the Arctic Council will take the leadership in the development of integrated marine management for the Arctic marine environment.

Revisions to the AMSP will provide the building blocks towards more coordinated and integrated approaches and supports policy decisions at the local, national, regional and at the international levels. It also responds to commitments by the global community to sustainable development and protection of marine biodiversity and the marine environment through the application of the ecosystem approach and integrated coastal and ocean management.

PRINCIPLES TO BE FOLLOWED:

- 1. Framework** - The application of an integrated, coordinated ecosystem based management for the Arctic marine environment.
- 2. Relevant and timely** - Topics must meet the needs of users in a timely fashion, in particular those from decision-makers and northern residents, particularly indigenous people. Approach:

At PAME I-2012 it was decided that the main implementation of this project would be postponed until shortly after the Arctic Council Ministerial Meeting in Kiruna, Sweden, in May 2013. The rationale behind this is that revisions to the AMSP will depend on the outcomes and recommendations from several key Arctic Council projects and studies such as the ABA, the AOR and the RP3 as mentioned above.

Prior to the main implementation phase of this project, there will be an outreach and scoping phase. PAME will invite representatives from the other AC Working Groups, the Permanent Participants and other relevant stakeholders to contributing towards revisions of the AMSP. If deemed relevant, PAME will also invite the other AC Working Groups and Permanent Participants to be part of a small scoping and drafting group. Included in the outreach and scoping phase, will be a scoping workshop with broad participation. The scoping workshop will be convened in June 2013.

The co-leads will engage an external expert in preparing for the 1st scoping workshop with the aim to assist in preparing a revised AMSP which sets forth a template to include revising the content, adding new relevant information, restructuring as needed and identifying some new thematic areas of work and a list of possible strategic actions.

Confirmed Co-leads: Canada, Iceland, Norway and USA

Budget: NOK 450.000

TIMELINE:

- February/March 2013: Selection of external expert to assist the co-leads
- March/April 2013: Outreach to other AC Working Groups, Permanent Participants and relevant stakeholders
- End of May 2013: First draft compilation report on relevant AC and international reports, studies and policies
- Mid-June 2013: Scoping workshop
- June/July 2013: Summary report from the scoping workshop capturing the key points raised
- July/August 2013: Consultations and preparation of the 1st draft structure and core content of a revised AMSP
- September 2013: Presentation by co-leads and discussions/inputs at PAME II-2013
- October 2013: Presentation at the SAO meeting and guidance sought, as appropriate
- October/November 2013: Prepare a 2nd draft and send out for consultations and comments
- January 2014: Co-leads revise/update and send out 3rd draft in advance of the PAME I-2014 meeting
- February/March 2014: Presentation by co-leads and discussions/inputs at PAME I-2014
- March/April 2014: Presentation at the SAO meeting and guidance sought, as appropriate
- Spring/summer 2014: consider convening a 2nd workshop
- September 2014: Presentation by co-leads and discussions/inputs at PAME II-2014
- October/November 2014: Presentation at the SAO meeting and guidance sought, as appropriate
- November/December 2014: Revisions and consultations as appropriate and prepare a final draft of the revised AMSP in advance of the PAME I-2015 meeting
- February/March 2015: Approval of the final draft revised AMSP to be forwarded to the 2015 Ministerial meeting
- May 2015: Final revised AMSP submitted to the Ministerial meeting for approval

OVERALL INDICATIVE BUDGET

Item	Budget (NOK)
External expert	150-200.000
Scoping workshop, June, Iceland?	150.000
Editing and printing of implementation report	75.000
Editing and printing of AMSP 2014	75.000
Total	450-500.000 ¹

¹ Any overspending could be covered by reallocation from other PAME projects supported by Norway if money left or application for fresh funds in 2014 (small amount)

PAME

Protection of the Arctic Marine Environment

Borgir, Nordurslod / 600 Akureyri / ICELAND

Tel: +354 461 1355 / Fax: +354 462 3390

Email: pame@pame.is / Homepage: www.pame.is